

**REMARKS:**

This paper is herewith filed in response to the Examiner's final Office Action mailed on December 19, 2007 for the above-captioned U.S. Patent Application. This Office Action is a final rejection of claims 1-5, 7-34, and 36 of the application.

More specifically, the Examiner has rejected claim 21 under 35 USC 101 because the claimed invention is directed to non-statutory subject matter; rejected claims 1-5, 7-16, 19-20, 22-34, and 36 under 35 USC 102(e) as anticipated by Larsson (US6,751,200); rejected claims 17 and 18 under 35 USC 103(a) as being unpatentable over Larsson in view of Isumi (US5,815,816); and rejected claim 21 under 35 USC 103(a) as being unpatentable over Larson in view of Langberg (US5,852,630). The Applicant respectfully traverses the rejections.

Claims 1, 3, 5, 10, 12, 15, and 21-23 have been amended for clarification. Claims 2, 4, 7-9, 11, 14, 16, 19-20, 25-34, and 36 have been cancelled. Claims 37-50 have been added. Support for the new claims can be found at least page 3, lines 21-24, page 8, line 1 to page 9, line 2, and page 11, line 10 to page 13, line 20. No new matter is added.

Regarding the rejection under 35 USC 101, claim 21 has been amended to address the rejection. Support for the amendment can at least be found on page 10, lines 12-15. No new matter is added. The rejection is seen as overcome and the Applicant respectfully requests that the rejection be removed.

Regarding the rejection of claim 1 the Applicant notes that claim 1 has been amended for clarification to recite:

A method comprising: **receiving a packet** at a first device in a first piconet of a scatternet comprising multiple piconets, wherein the packet is for delivery to a destination device in a second piconet of the scatternet and wherein the scatternet has a first network topology; **determining whether it is possible to modify the first network topology by creating a direct radio communications link,**

**between the first device and the destination device, that adds a short-circuit to the first network topology and converts the topology of the scatternet from the first network topology to a second, different, network topology; if it is not possible to add the short-circuit, forwarding the packet within the first network topology of the scatternet; and if it is possible to add the short-circuit: creating a new direct radio communications link between the first device and the destination device that adds the short-circuit to the first network topology and converts the topology of the scatternet from the first network topology to a second, different, network topology; and, transmitting the packet via the new direct radio communications link of the second network topology.**

Regarding the rejection of claim 1 the Examiner states:

“Larsson et al. discloses a method and system, comprising: creating a direct radio communications link between a first device in a first piconet of a scatternet (any node shown in Fig. 2 can be a first device, for example, node M8 in piconet 9 of the scatternet shown in Fig. 2; a piconet is a star-topology sub-network; and a scatternet is a distributed low power radio frequency network) and a destination device in a second piconet of the scatternet (any node shown in Fig. 2 that is in a piconet that is not occupied by the first device can be the destination device, for example, a slave node in piconet 7), wherein the direct radio communications link creates a short-circuit in the network topology and transmitting a packet via the direct radio communications link (the link created by piconet 8 that connects the two node as shown on Fig. 2 creates the short-circuit).”

Firstly, the Applicant notes that Larsson appears to disclose methods as illustrated in Figures 6 and 7 in which **a new route discovery process is initiated** upon a source having packets to send, (col. 5, lines 44-46). The Applicant submits that Larsson can not be seen to disclose or suggest at least the elements of claim 1 which relate to **first determining whether it is possible** to add a short-circuit between a first device and a destination device that creates a direct radio communications link and converts the topology of a scatternet from a first network topology to a second, different, network topology, where **if it is not possible** then forwarding a packet within the first network topology and where **if it is possible** then creating the new direct radio communications link to convert the topology of the scatternet and **transmitting the packet via the new direct radio communications link**.

With regards to Figure 6 the Applicant notes that in Larsson a first determination is made as to whether the source node is a member of an existing piconet (see step 605) and then if the determination is “yes” a subsequent determination is made as to whether a timely REPLY message is received (see step 615). As illustrated in Figure 6 it can be seen that a “no” determination in any of these steps directs the flow chart next to step 635 where a new route discovery process attempts to establish new piconets, ( col. 5, line 50 to col. 6, line 3). The Applicants contend that neither of these steps can be seen to relate to determining **whether it is possible** to modify the first network topology by creating a direct radio communications link, between the first device and the destination device as in claim 1.

Further, it is noted that if both determinations at step 605 and step 615 as stated above are affirmative then the flow chart in Figure 6 is eventually directed to step 620 of where Larsson discloses that the source node may determine that it is more efficient to send its packets to the destination node along the route defined in the REPLY message. If this is the case, as Larsson discloses, a new route discovery process is initiated. However, the Applicant submits that **whether or not this is the case** it can be seen that in Larsson that the packets are still routed through the existing piconet, (steps 625 and 630 of Fig. 6 and col. 6, lines 4-17).

Regarding the method steps illustrated in Figure 7 the Applicants note that Larsson appears to disclose that a first step 705 is in accordance with a “no” decision at step 615 of Figure 6, (col. 6, lines 49-53). As stated above step 615 relates to a determination as to whether a timely REPLY message is received. Moreover, in step 710 Larsson makes a determination as to whether a reply is received prior to establishing a new piconet. The Applicant submits that Larsson appears to disclose that only if the reply message is not received does Larsson appear to send the packets over the new piconet. The Applicant contends that Larsson clearly does not disclose or suggest upon **receiving a packet** at a first device **first determining whether it is possible** to add a short-circuit creating a new direct radio communications link between a first device and a destination device, where if **it is possible** then creating the new direct radio communications link and **also transmitting the packet via the new direct radio communications link** as in claim 1.

The Applicant contends that there is no disclosure or suggestion in Larsson which can be seen to disclose or suggest at least where claim 1 recites in part “**receiving a packet at a first device [...] determining whether it is possible to modify the first network topology by creating a direct radio communications link**, between the first device and the destination device, that adds a short-circuit to the first network topology and converts the topology of the scatternet from the first network topology to a second, different, network topology; if it is not possible to add the short-circuit, forwarding the packet within the first network topology of the scatternet; and **if it is possible to add the short-circuit: creating a new direct radio communications link** between the first device and the destination device that adds the short-circuit to the first network topology and converts the topology of the scatternet from the first network topology to a second, different, network topology; and, **transmitting the packet via the new direct radio communications link** of the second network topology.”

The Applicant submits that for at least the reasons stated Larsson can not be seen to disclose or suggest claim 1 and the rejection of claim 1 should be removed.

Furthermore, the Applicants submit that Isumi as cited by the Examiner can not be seen to overcome a shortfall of Larsson as stated above.

In addition, the Applicant submits that for at least the reason that independent claims 22 and 23 recite features similar to claim 1 as stated above the references cited are not seen to disclose or suggest claims 22, and 23. Thus, the rejection of these claims should be removed.

In addition, although the Applicant does not agree that a combination of the references cited is feasible or possible, for at least the reasons already stated the Applicant contends that such a combination would still not suggest the claims.

In addition, it is noted that although the Applicant has not argued all the rejections in the Office Action the Applicant does not acquiesce to any rejections not presently argued.

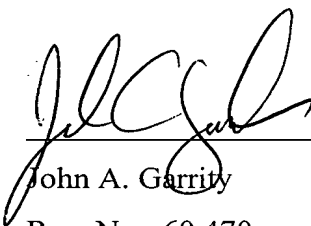
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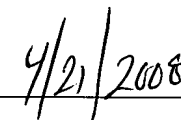
Further, for at least the reasons that claims 3, 5, 10, 12, 13, 15, 17-18, 21, and 37-38; claims 39-47; and claims 24, and claims 24, and 48-50 depend from claims 1, 22, and 23, respectively, the references cited are not seen to disclose or suggest these claims.

Based on the above explanations and arguments, it is clear that the references cited cannot be seen to disclose or suggest claims 1, 3, 5, 10, 12, 13, 15, 17-18, 21-23, and 37-38. The Examiner is respectfully requested to reconsider and remove the rejections of claims 1, 3, 5, 10, 12, 13, 15, 17-18, 21-23, and 37-38 and to allow all of the pending claims 1, 3, 5, 10, 12, 13, 15, 17-18, 21-23, and 37-38 as now presented for examination.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record. Should any unresolved issue remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

Respectfully submitted:

  
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